

IN THE CLAIMS:

Please cancel claims 1-7.

1. (Canceled)
2. (Canceled)
3. (Canceled)
4. (Canceled)
5. (Canceled)
6. (Canceled)
7. (Canceled)
8. (New) A method for using an IP address on a LAN including a router and a LAN device, performed in the router, comprising:
  - upon receipt of a unique IP address request from the LAN device, allocating a non-used unique IP from a dynamic unique IP address pool having a plurality of unique IP addresses to the LAN device, and storing the allocated unique IP address corresponding to a LAN IP address of the LAN device in a unique IP address allocation table;
  - upon receipt of a packet from the LAN device, determining whether the origination party's IP address of the packet is registered in the unique IP address allocation table;
  - when the origination party's IP address is not registered in the unique IP address allocation table, changing the origination party's IP address of the packet to a unique IP address of the router to transmit it to the Internet;

when the origination party's IP address is registered in the unique IP address allocation table, changing the origination party's IP address of the packet to a unique IP address corresponding to the origination party's IP address, to transmit it to the Internet; and

when the allocated unique IP address is returned from the LAN device, adding the allocated unique IP address returned from the LAN device to the dynamic unique IP address pool, and deleting the returned unique IP address and its corresponding LAN IP address in the unique IP address allocation table.

9. (New) The method as claimed in claim 8, further comprising:

upon receipt of a packet from the Internet, determining whether the received IP address of the packet is registered in the unique IP address allocation table;

when the received IP address is not registered in the unique IP address allocation table, changing the received IP address of the packet to a LAN IP address which is an origination party's IP address having been changed to the unique IP address of the router, to transmit it to the LAN device;

when the received IP address is registered in the unique IP address allocation table, changing the received IP address of the packet to a LAN IP address corresponding to the received IP address, to transmit it to the LAN device.

10. (New) A system for using an IP address on a LAN comprising:

a LAN device, connected to a router, for sending a request for a unique IP address allocation to the router, when an Internet application is started and it is determined that it is necessary to use a unique IP address, performing the application after receiving an allocated unique IP address from the router, transmitting to the router a packet to be transmitted to the Internet by using an origination party's IP address as its own LAN IP address, and returning the allocated unique IP address to the router after using the allocated unique IP address; and

the router, connected to the LAN device, for receiving the request for the unique IP address from the LAN device and allocating a non-used unique IP address of a plurality of unique IP addresses to the LAN device;

wherein a packet received from a LAN device which is not allocated the unique IP address is transmitted to the Internet changing the origination party's IP address to a unique IP address of the router, and a packet received from a LAN device which is allocated the unique IP address is transmitted to the Internet changing the origination party's IP address to the allocated unique IP address.

11. (New) The system as claimed in claim 10, wherein when the received IP address receives a packet being the allocated unique IP address from the Internet, said router changes the received IP address of the packet to a LAN IP address corresponding to the allocated unique IP address to transmit it to the LAN device.
12. (New) The system as claimed in claim 10, wherein said LAN device informs the allocated unique IP address, when it is necessary for an application performed in the LAN device to inform the other party of its own IP address.
13. (New) The system as claimed in claim 11, wherein said LAN device informs the allocated unique IP address, when it is necessary for an application performed in the LAN device to inform the other party of its own IP address.